

Figure 1

20 ug/mL Proteinase K

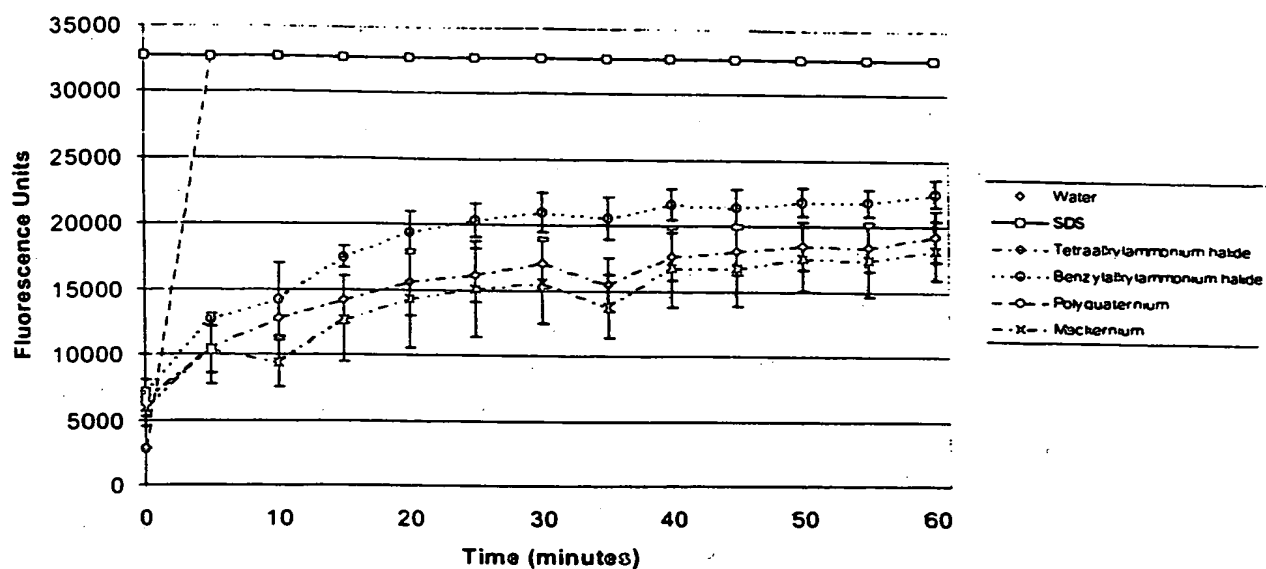


Figure 2A

2.5 ug/mL Proteinase K

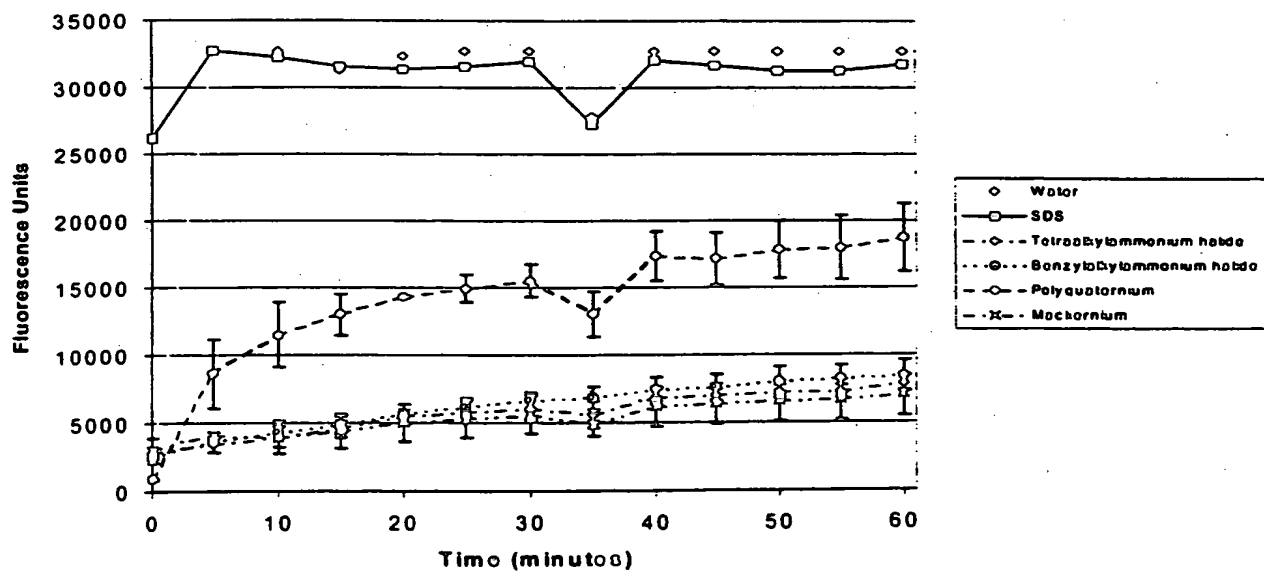


Figure 2B

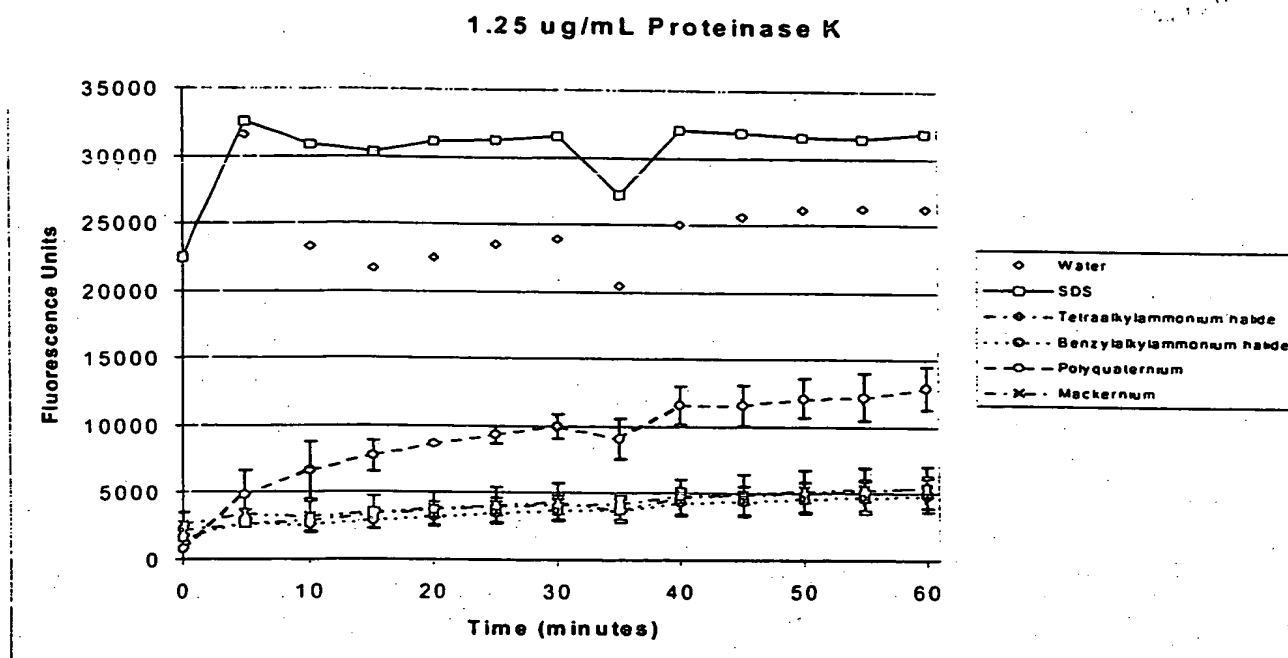


Figure 2C

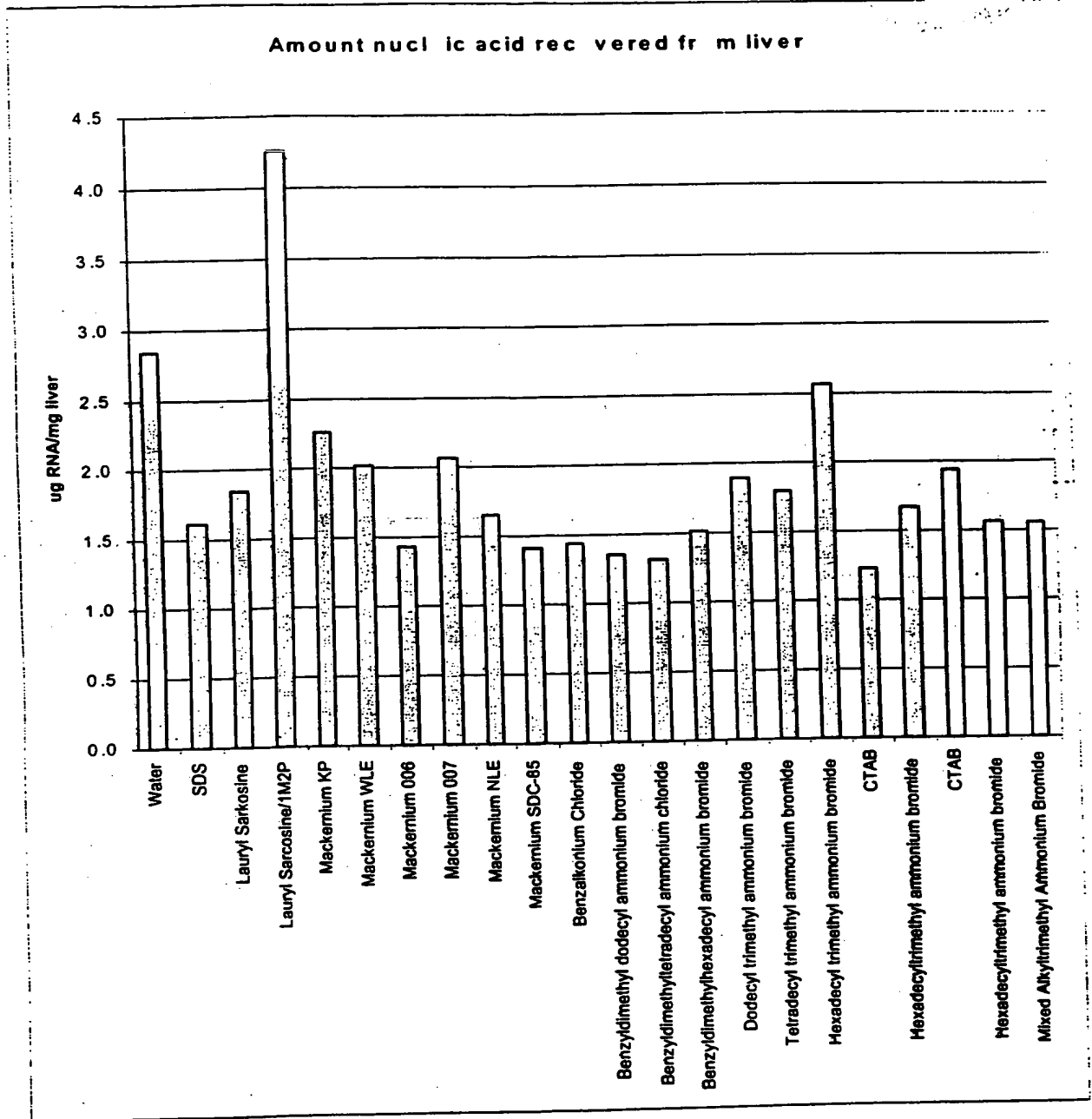


Figure 3

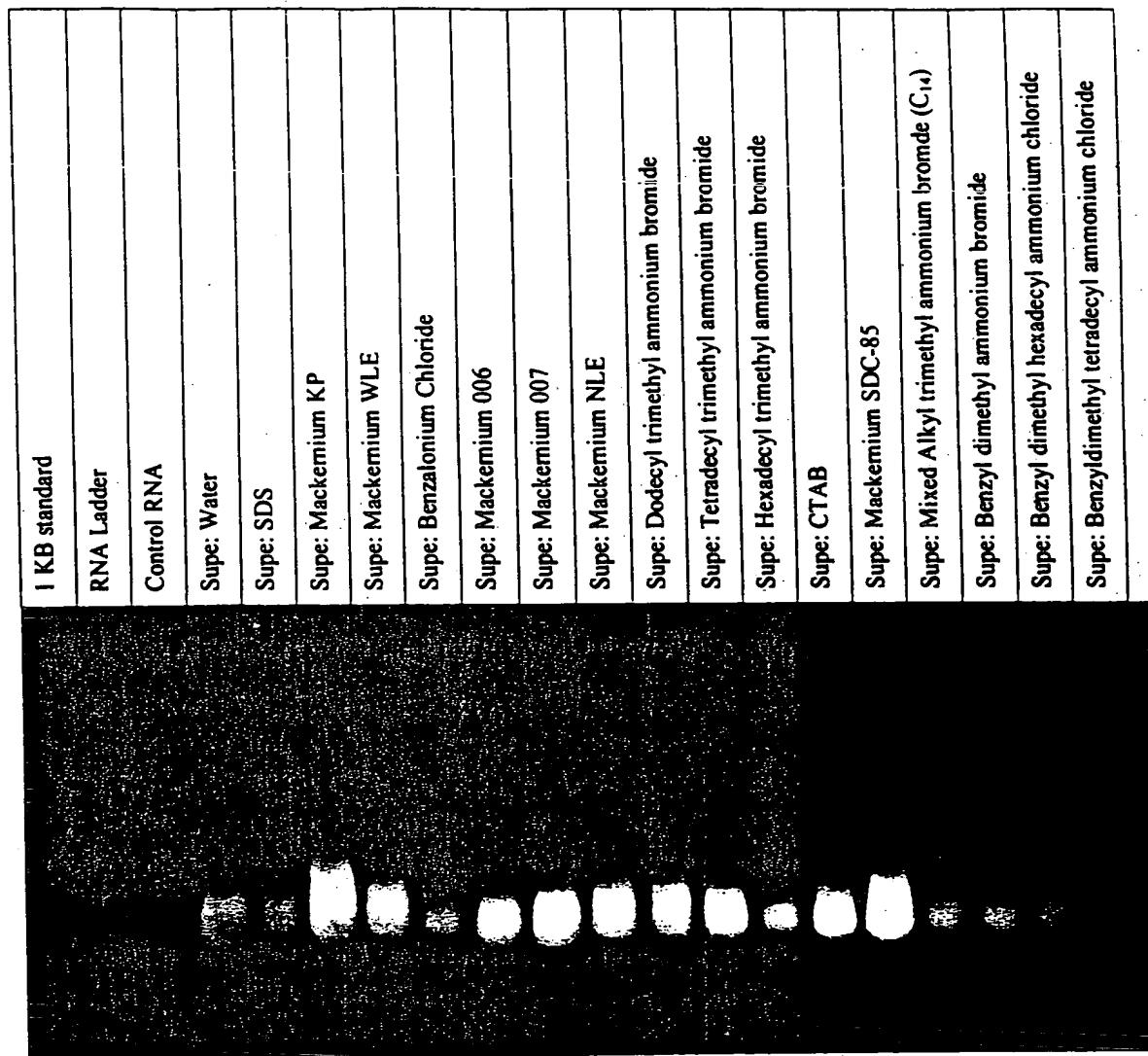

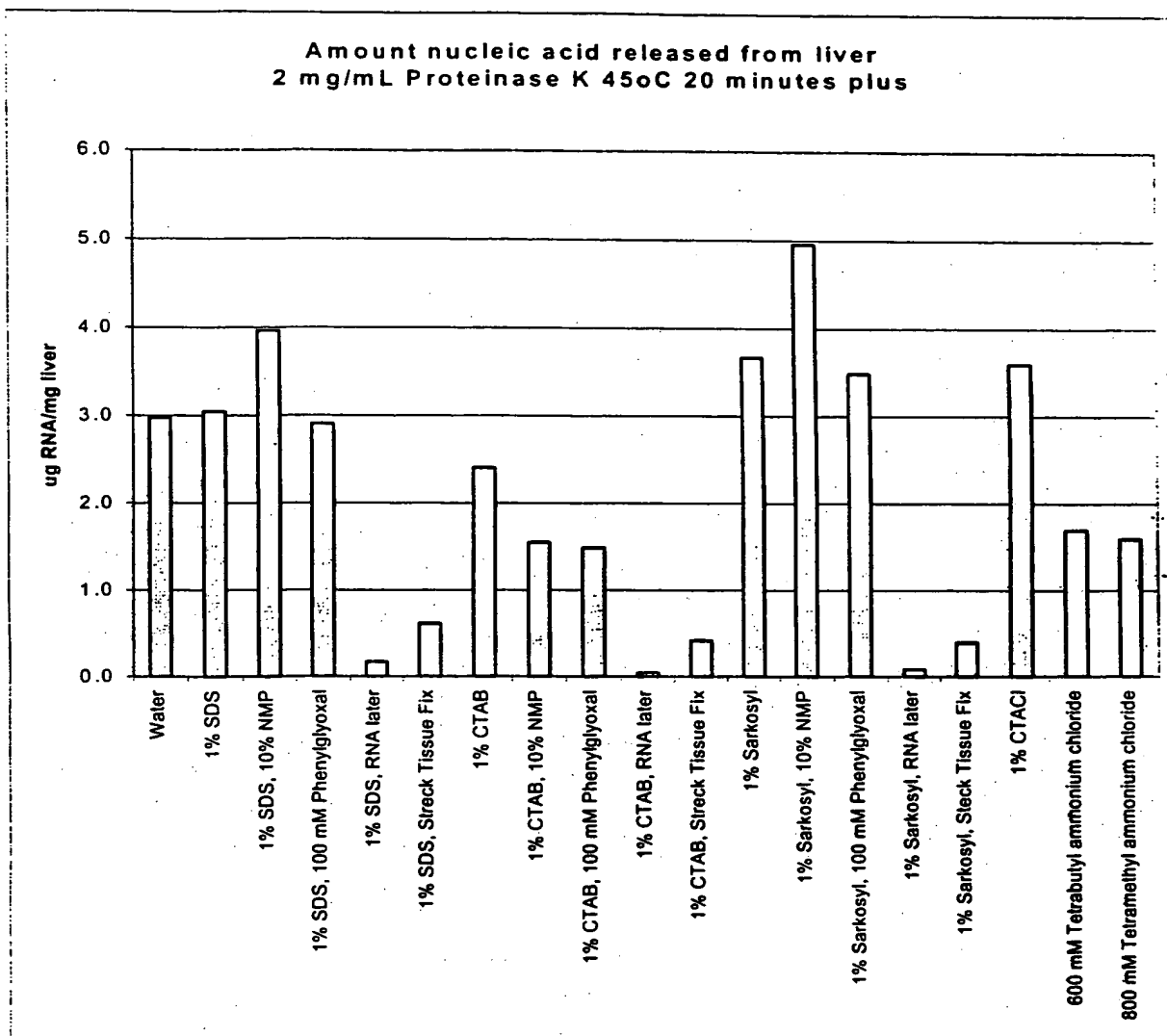


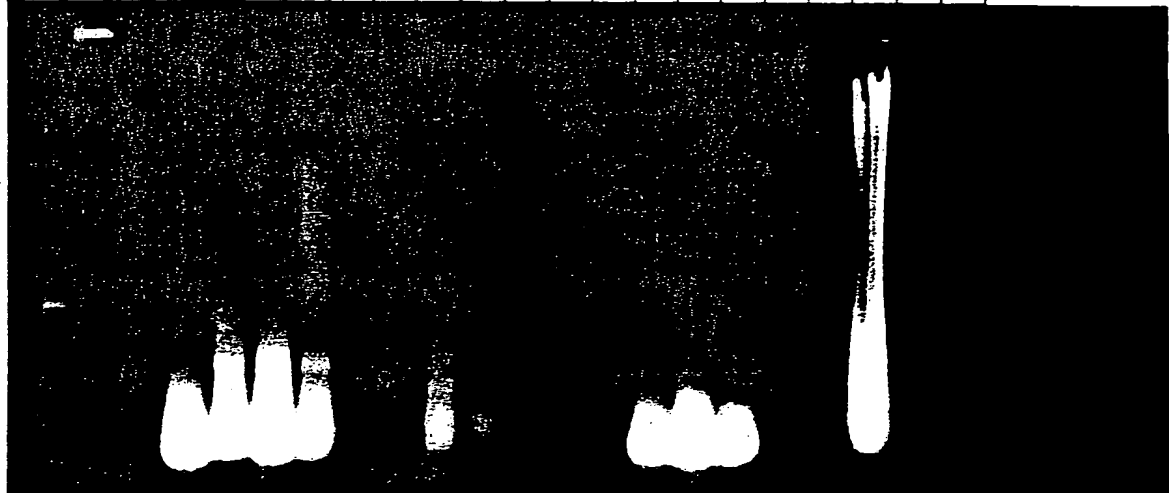
Figure 4



Supel: Hexadecyl trimethyl ammonium bromide
Supel: CTAB
Supel: Hexadecyl trimethyl ammonium bromide
Supel: Lauryl sarcosine
Supel: Lauryl sarcosine/1-methyl 2-pyrrolidone
Pellet: Water
Pellet: SDS
Pellet: Mackernium KP
Pellet: Mackernium WLE
Pellet: Benzaloniun Chloride
Pellet: Mackernium 006
Pellet: Mackernium 007
Pellet: Mackernium NLE
Pellet: Dodecyl trimethyl ammonium bromide
Pellet: Tetradecyl trimethyl ammonium bromide
Pellet: Hexadecyl trimethyl ammonium bromide
Pellet: CTAB
1 KB standard
RNA Ladder
Control RNA

Figure 4 (cont.)

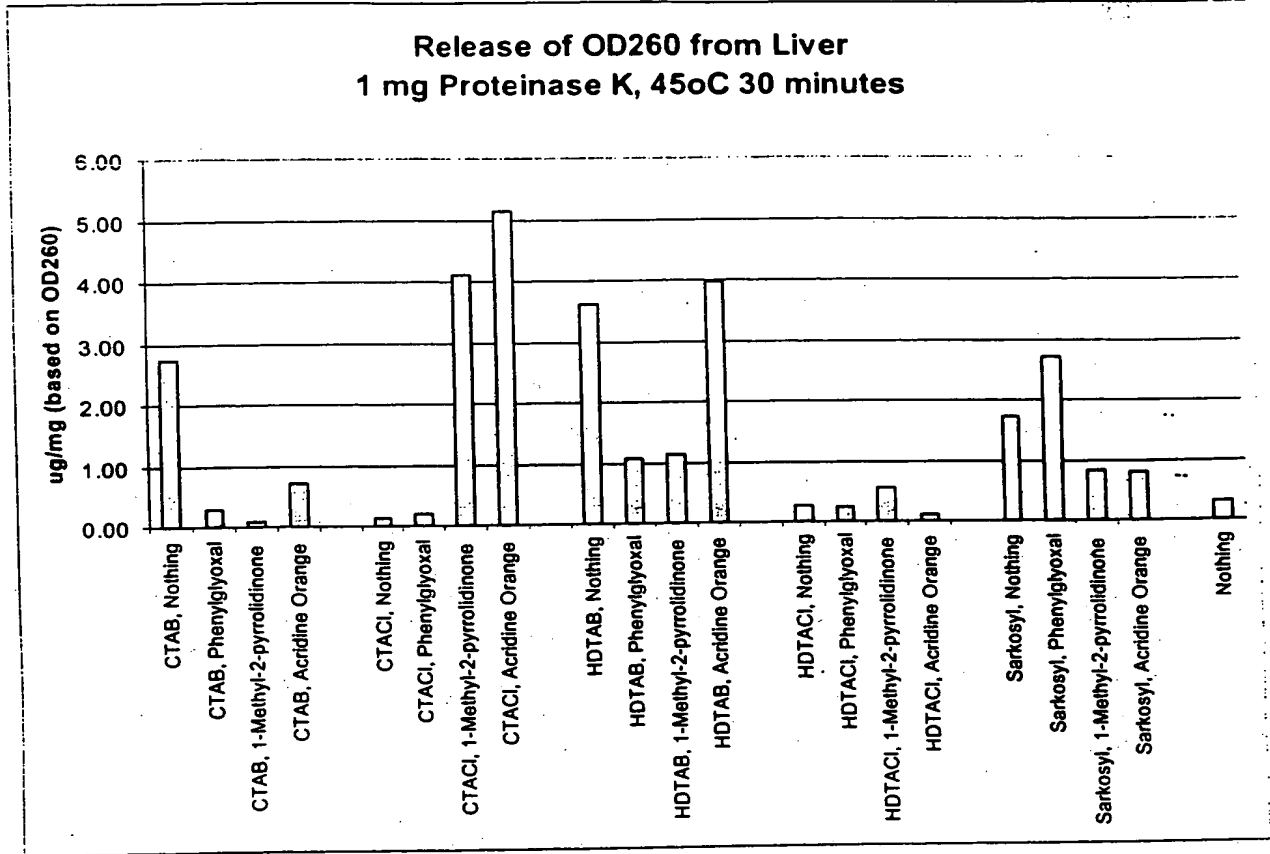
**Figure 5**

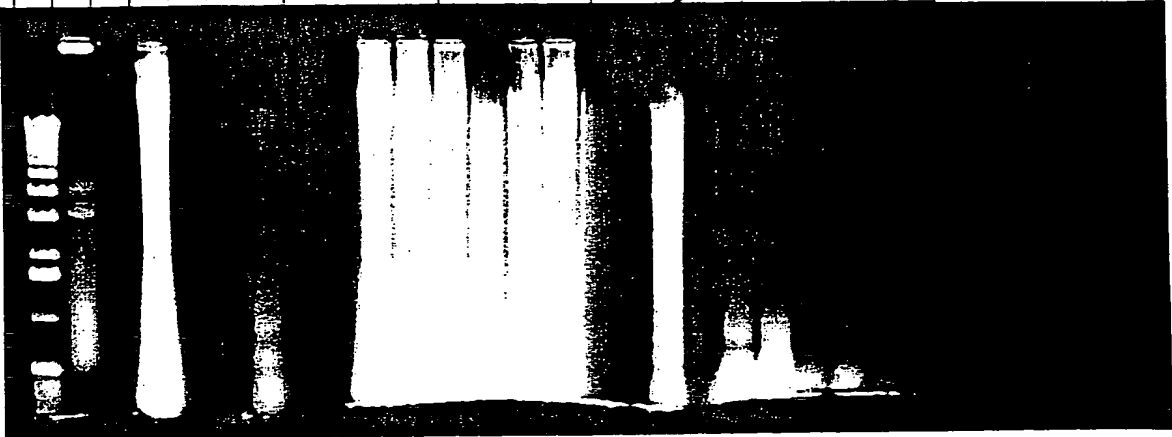


The gel image shows DNA bands for various samples and detergents. The samples are arranged in two columns. The left column contains: IKB DNA Standard, RNA Ladder, Human RNA control, No detergent, 1% SDS, 10% 1 Methyl 2-pyrrolidinone, 100 mM phenylglyoxal, RNA Later, Streck Tissue Fixative, 1% CTAB, 10% 1 Methyl 2-pyrrolidinone, 100 mM phenylglyoxal, RNA Later, Streck Tissue Fixative, 1% CTAB, 1% Sarkosyl, 10% 1 Methyl 2-pyrrolidinone, 100 mM phenylglyoxal, RNA Later, Streck Tissue Fixative, 1% Sarkosyl, 1% CTACl, 600 mM tetrabutyl ammonium, and 800 mM tetramethyl. The right column contains: IKB DNA Standard, RNA Ladder, Human RNA control, No detergent, 1% SDS, 10% 1 Methyl 2-pyrrolidinone, 100 mM phenylglyoxal, RNA Later, Streck Tissue Fixative, 1% CTAB, 10% 1 Methyl 2-pyrrolidinone, 100 mM phenylglyoxal, RNA Later, Streck Tissue Fixative, 1% CTAB, 1% Sarkosyl, 10% 1 Methyl 2-pyrrolidinone, 100 mM phenylglyoxal, RNA Later, Streck Tissue Fixative, 1% Sarkosyl, 1% CTACl, 600 mM tetrabutyl ammonium, and 800 mM tetramethyl. The bands are visible in the left column, indicating successful DNA extraction and amplification for those samples.

IKB DNA Standard	
RNA Ladder	
Human RNA control	
	No detergent
	1% SDS
10% 1 Methyl 2-pyrrolidinone	1% SDS
100 mM phenylglyoxal	1% SDS
RNA Later	1% SDS
Streck Tissue Fixative	1% SDS
	1% CTAB
10% 1 Methyl 2-pyrrolidinone	1% CTAB
100 mM phenylglyoxal	1% CTAB
RNA Later	1% CTAB
Streck Tissue Fixative	1% CTAB
	1% Sarkosyl
10% 1 Methyl 2-pyrrolidinone	1% Sarkosyl
100 mM phenylglyoxal	1% Sarkosyl
RNA Later	1% Sarkosyl
Streck Tissue Fixative	1% Sarkosyl
	1% CTACl
600 mM tetrabutyl ammonium	No detergent
800 mM tetramethyl	No detergent

Figure 6

**Figure 7**



None	Cetyltrimethylammonium bromide	
phenylglyoxal	Cetyltrimethylammonium bromide	
1-methyl-2-pyrrolidinone	Cetyltrimethylammonium bromide	
Acridine Orange	Cetyltrimethylammonium bromide	
None	Cetyltrimethylammonium chloride	
phenylglyoxal	Cetyltrimethylammonium chloride	
1-methyl-2-pyrrolidinone	Cetyltrimethylammonium chloride	
Acridine Orange	Cetyltrimethylammonium chloride	
None	Hexadecyltrimethylammonium bromide	
phenylglyoxal	Hexadecyltrimethylammonium bromide	
1-methyl-2-pyrrolidinone	Hexadecyltrimethylammonium bromide	
Acridine Orange	Hexadecyltrimethylammonium bromide	
None	Hexadecyltrimethylammonium chloride	
phenylglyoxal	Hexadecyltrimethylammonium chloride	
1-methyl-2-pyrrolidinone	Hexadecyltrimethylammonium chloride	
Acridine Orange	Hexadecyltrimethylammonium chloride	
None	Sarkosyl	
phenylglyoxal	Sarkosyl	
1-methyl-2-pyrrolidinone	Sarkosyl	
Acridine Orange	Sarkosyl	
	No detergent	

Figure 8

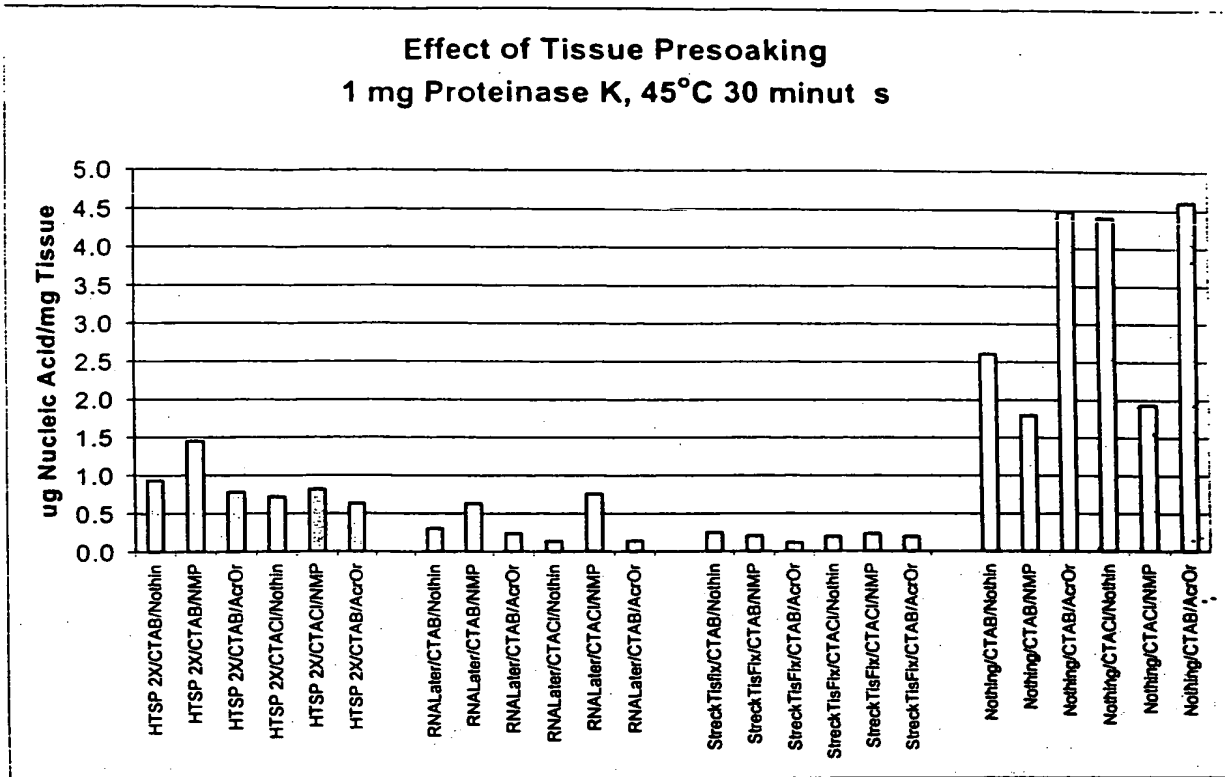
**Figure 9**

Figure 10

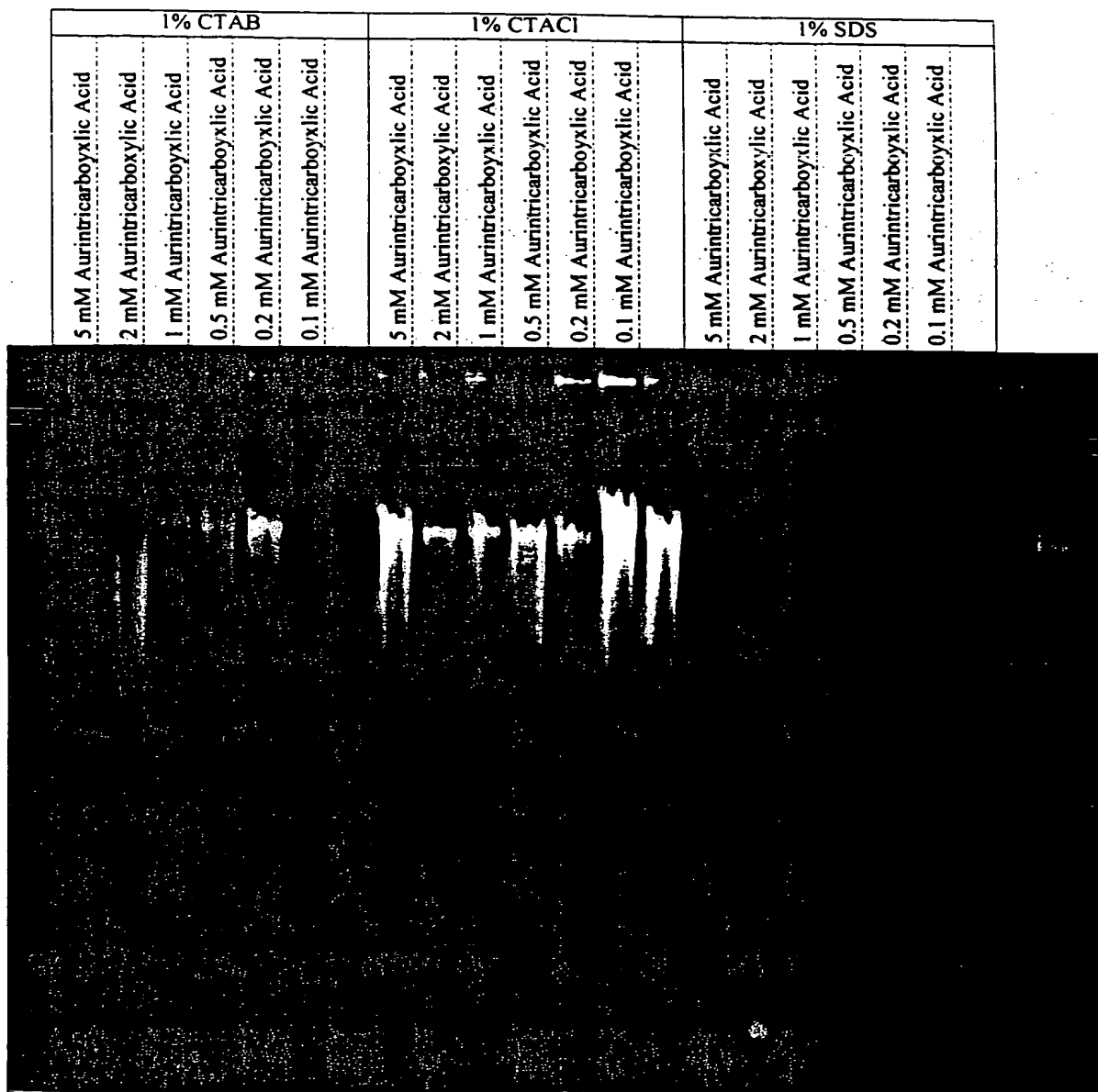


Figure 11

Dodecyltrimethylammonium bromide	
Tetradecyltrimethylammonium bromide	
Cetyltrimethylammonium bromide	
Cetyltrimethylammonium chloride	
Hexadecyltrimethylammonium bromide	
Hexadecyltrimethylammonium bromide	
Mackernium 006 (Polyquaternium 6)	
Mackernium KP (Olealkonium chloride)	
Mackernium NLE (Quaternium-84)	
Mackernium 007 (Polyquaternium-7)	
Mackernium Stearalkonium SDC85 Chloride	
Benzalkonium chloride	
SDS	
Nothing	

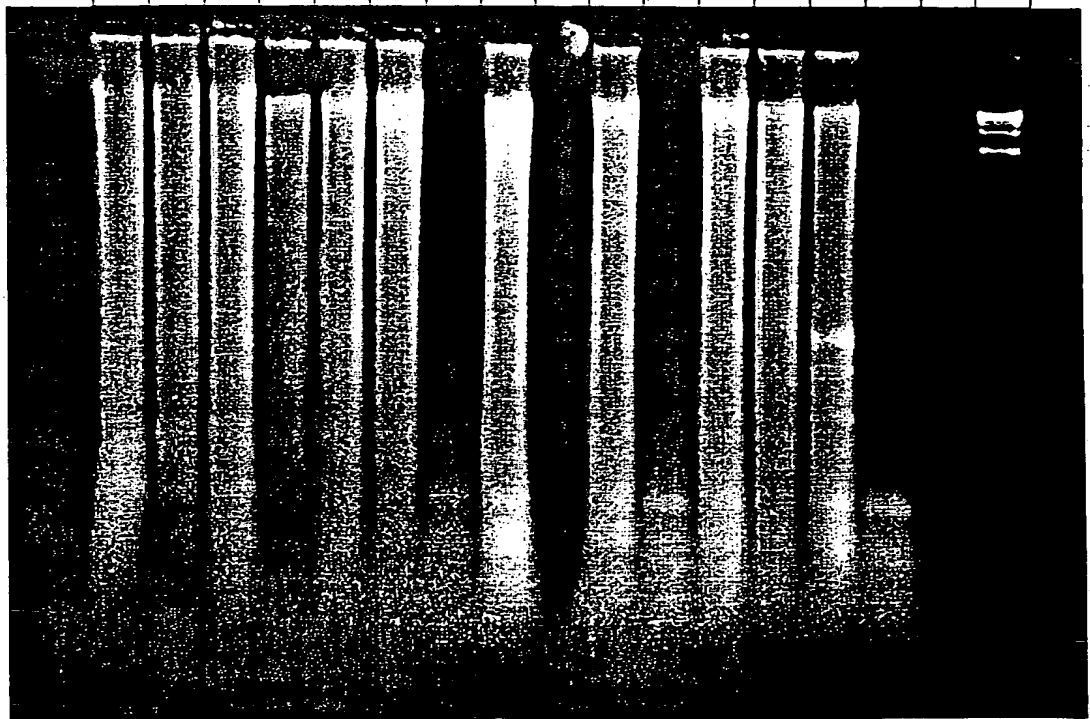


Figure 12

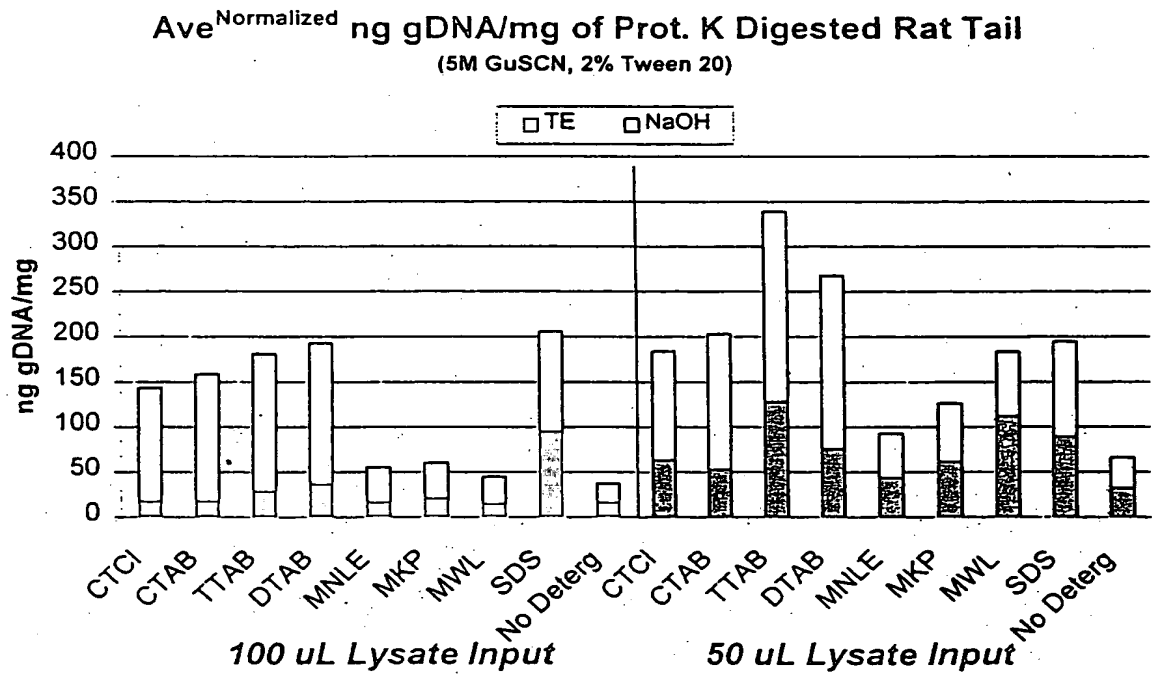


Figure 13

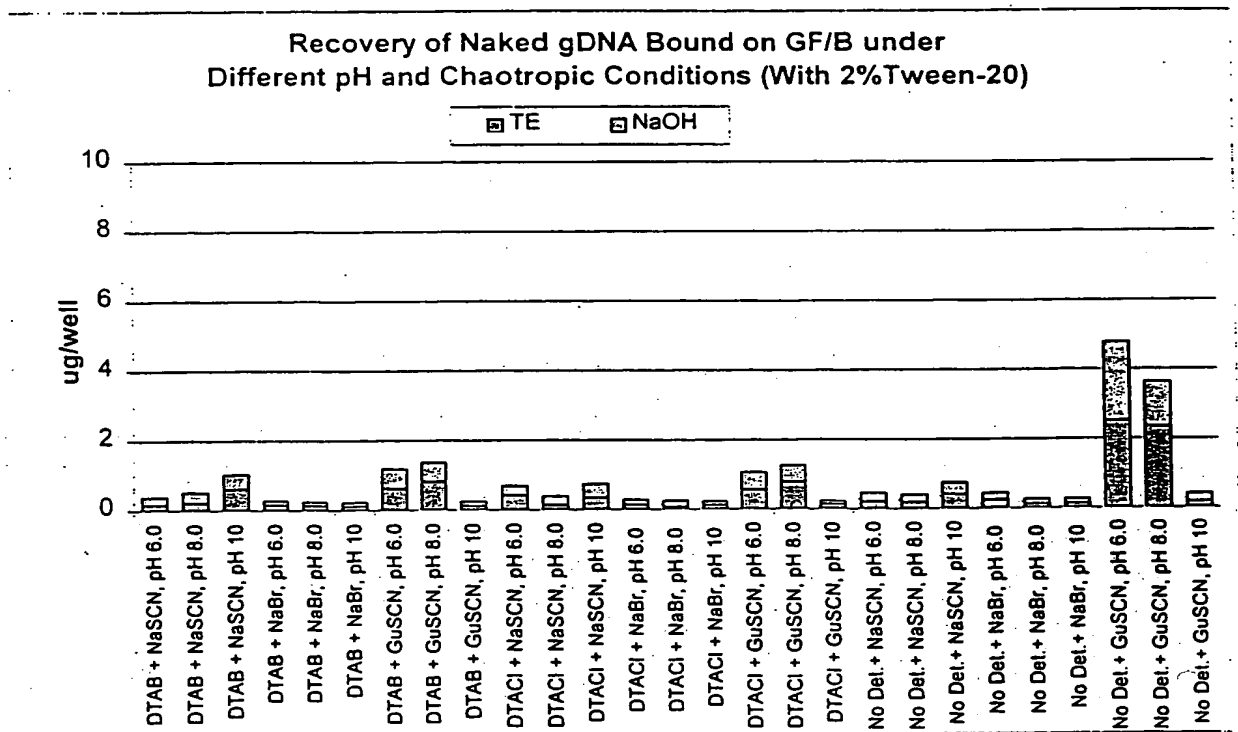


Figure 14

Recovery of Naked gDNA Bound on GF/B under Different pH and Chaotropic Conditions (No Tween-20)

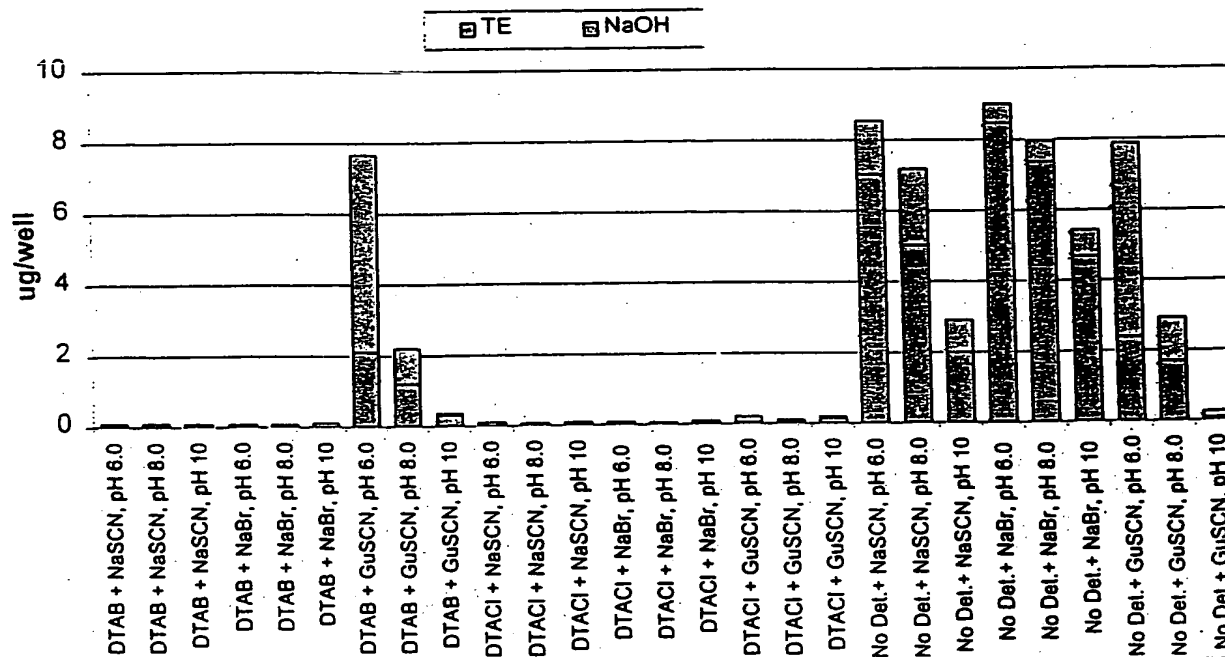


Figure 15

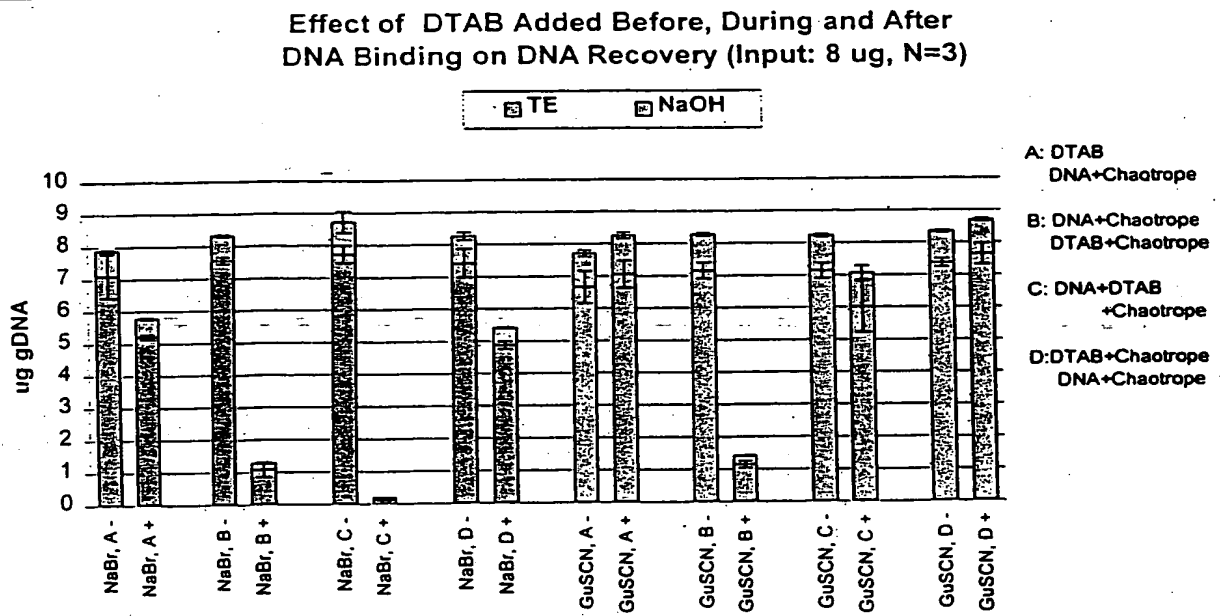


Figure 16

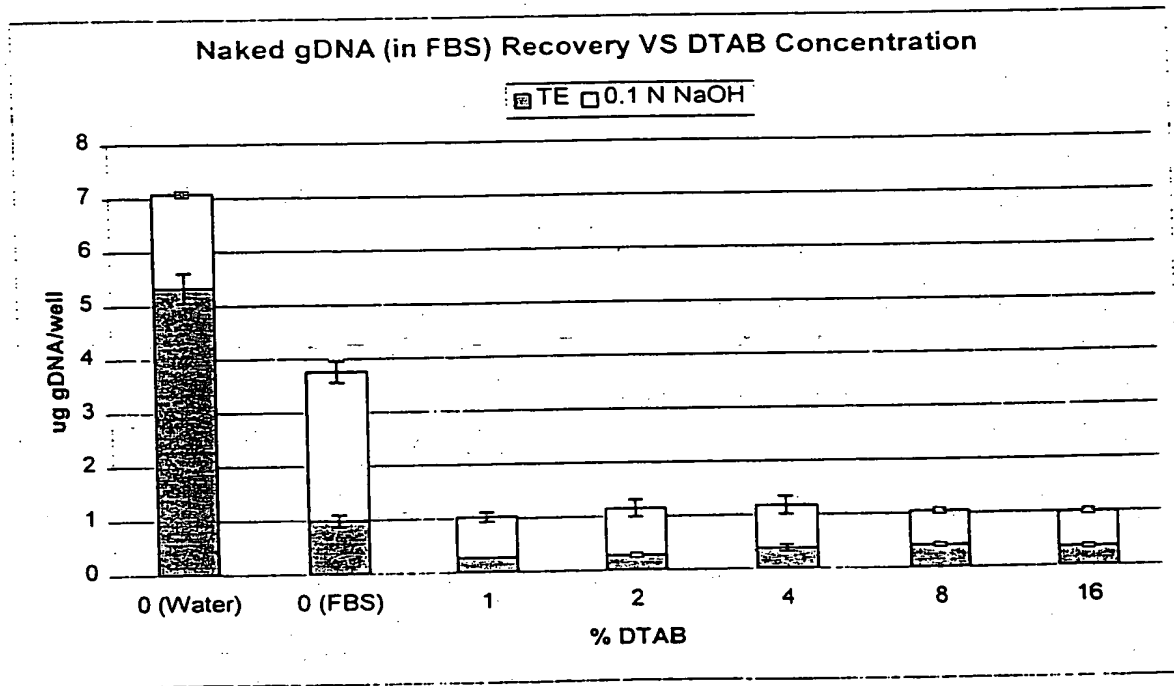


Figure 17

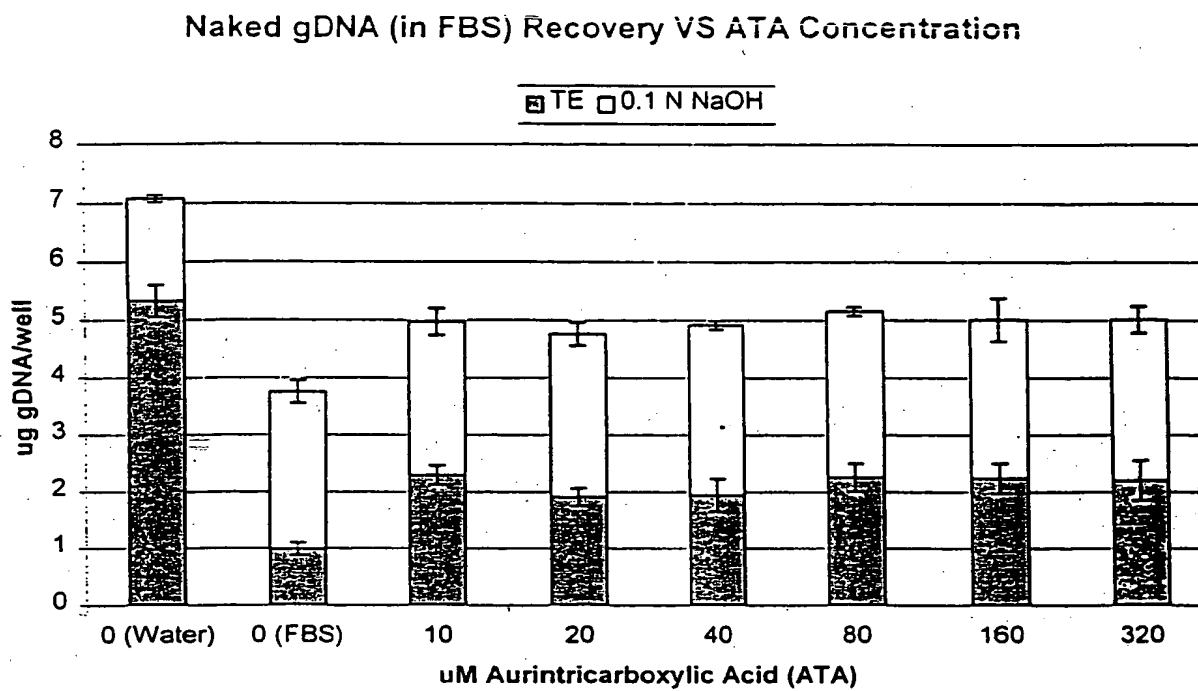


Figure 18

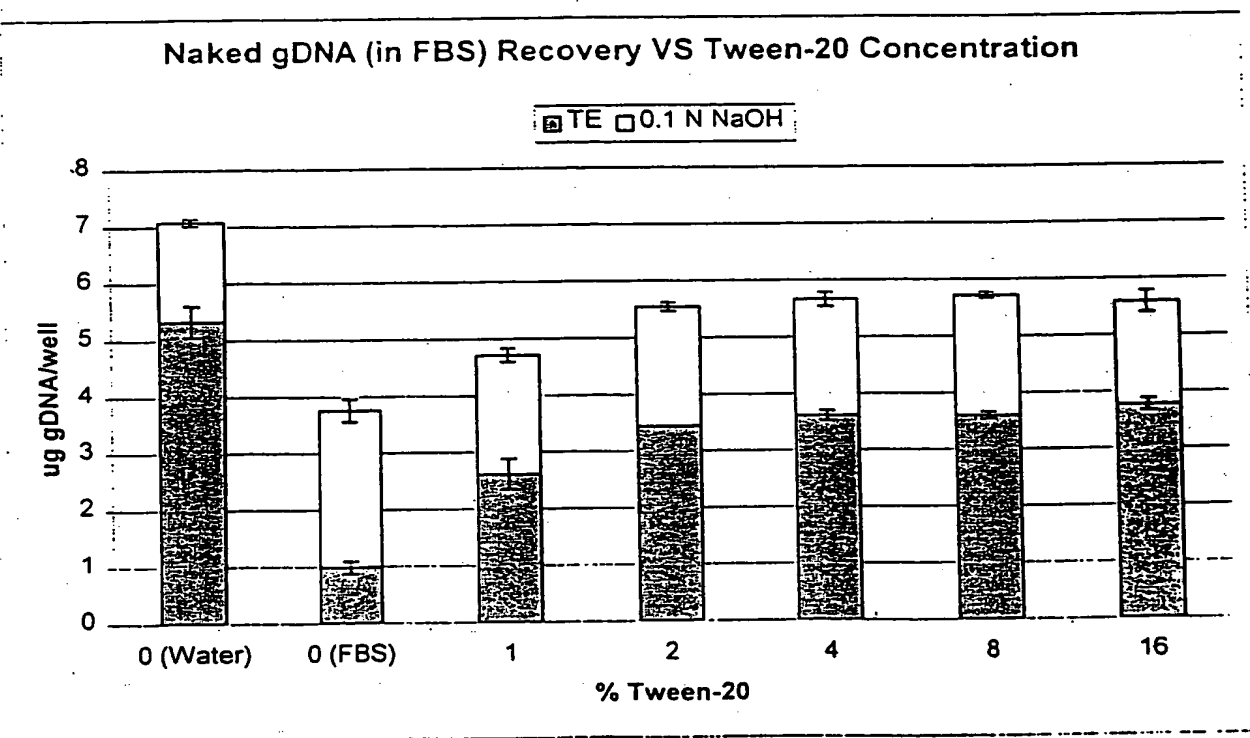


Figure 19

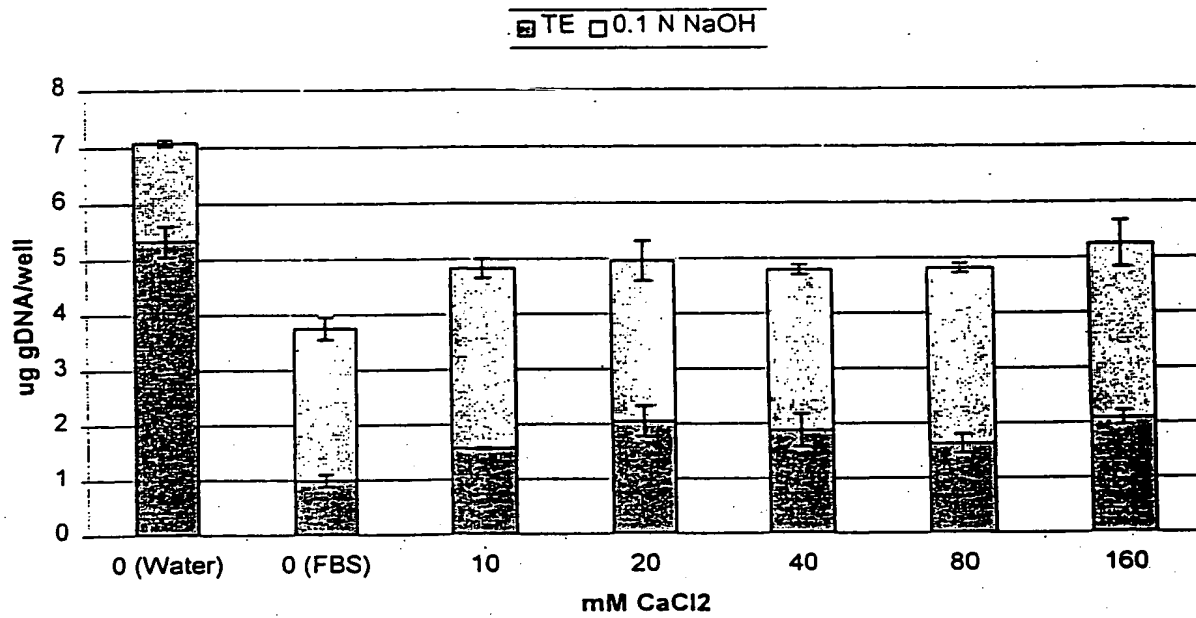
Naked gDNA (in FBS) Recovery VS CaCl₂ Concentration

Figure 20

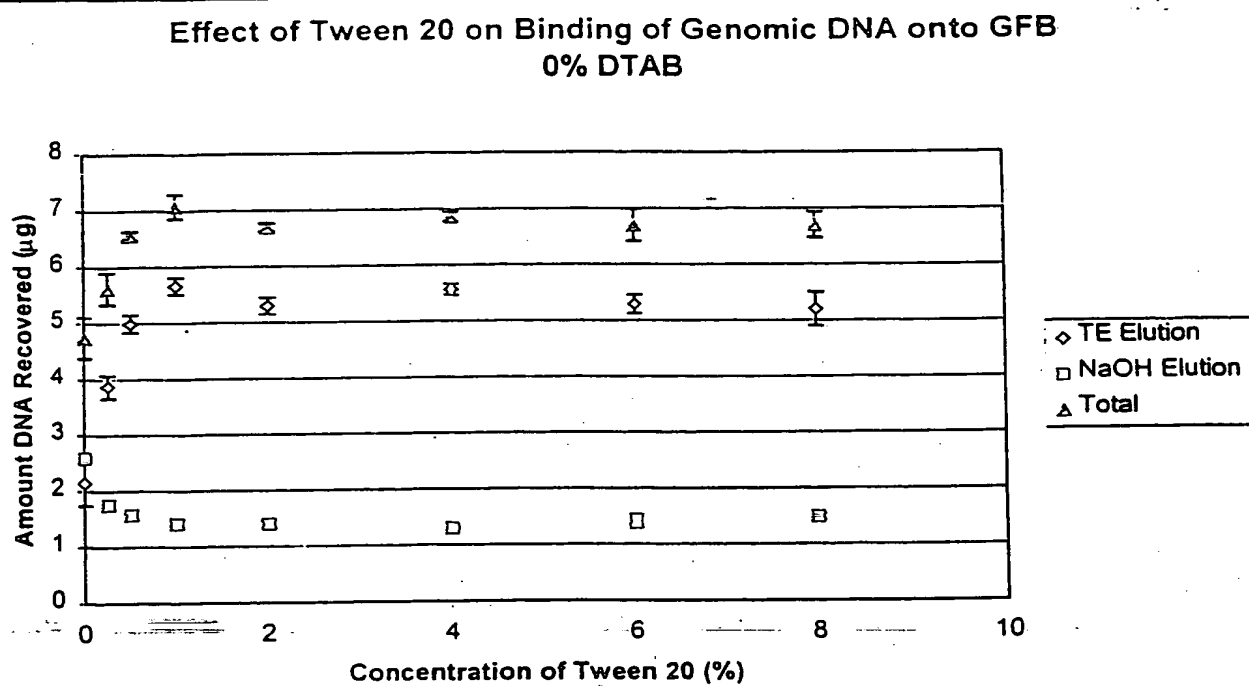


Figure 21

Effect of Tween 20 on Binding of Genomic DNA onto GFB
1% DTAB

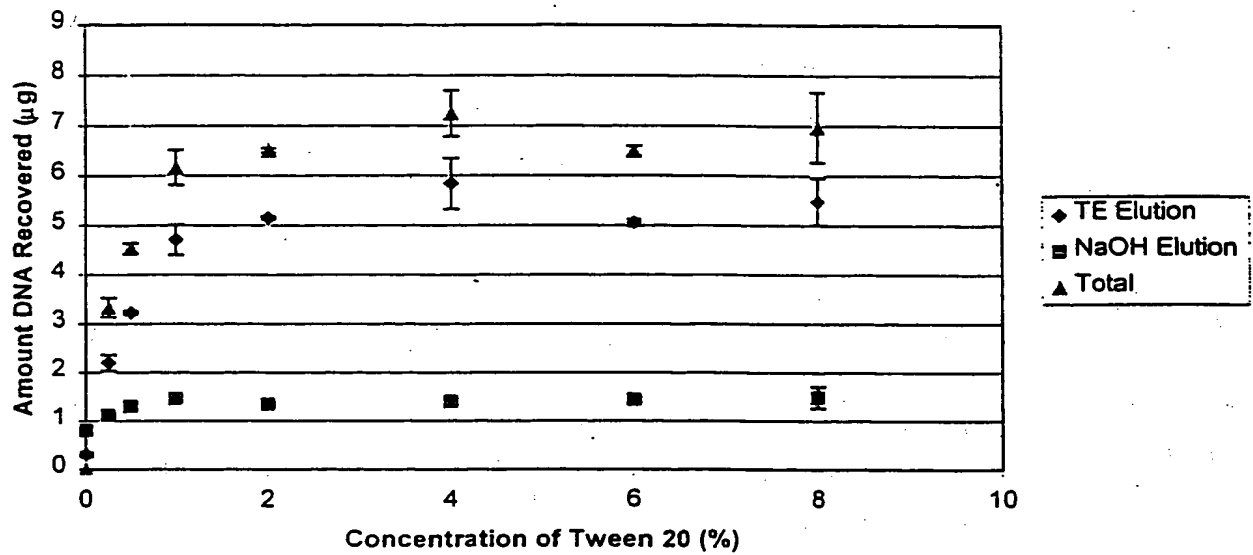


Figure 22

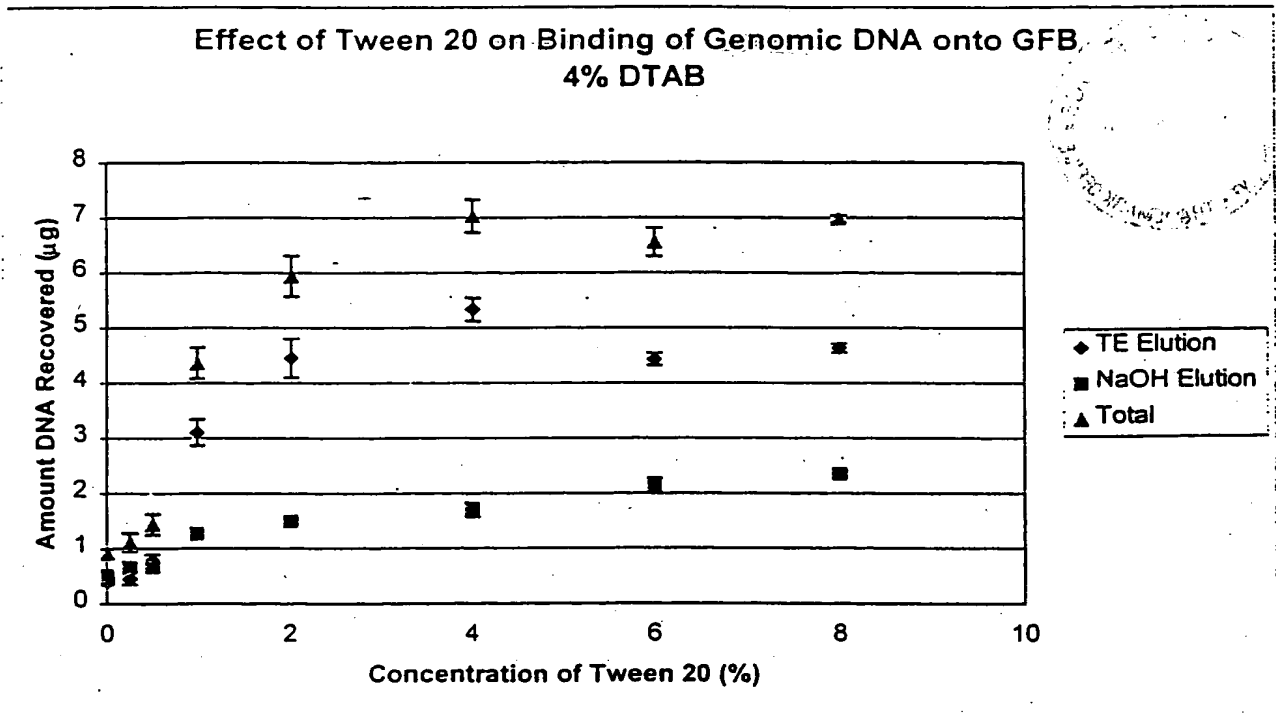


Figure 23

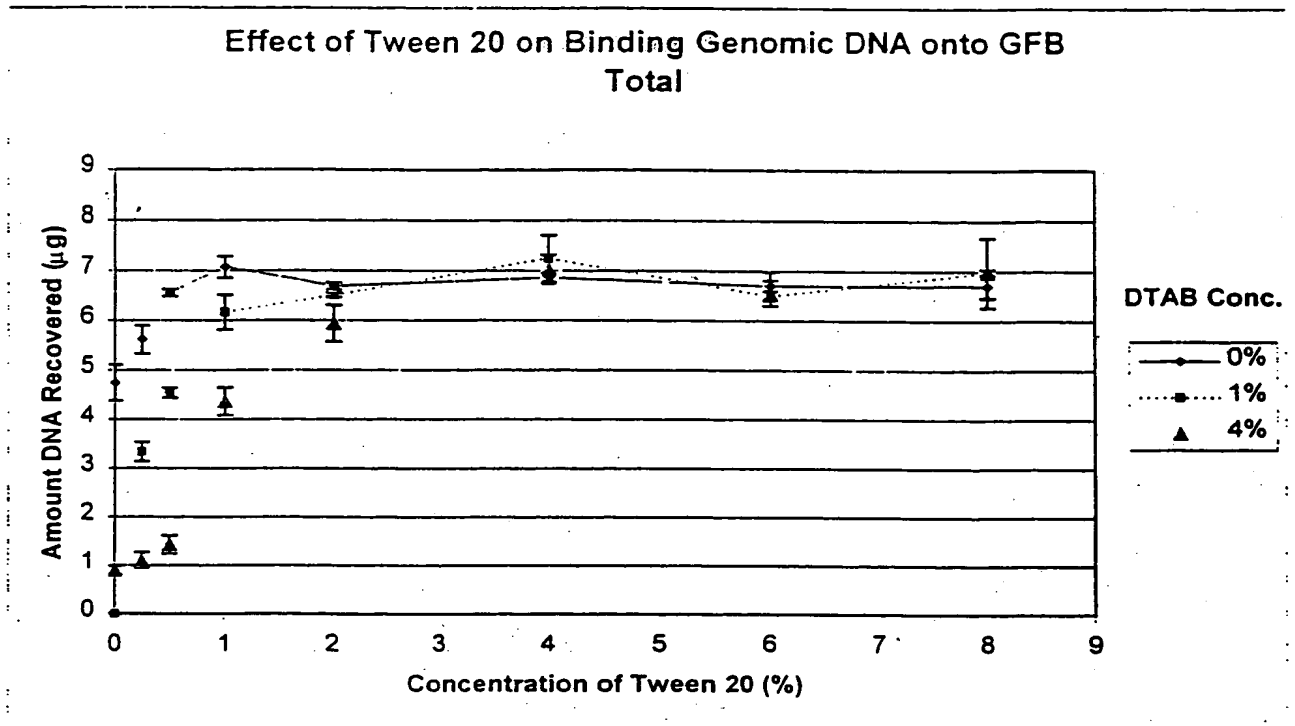


Figure 24

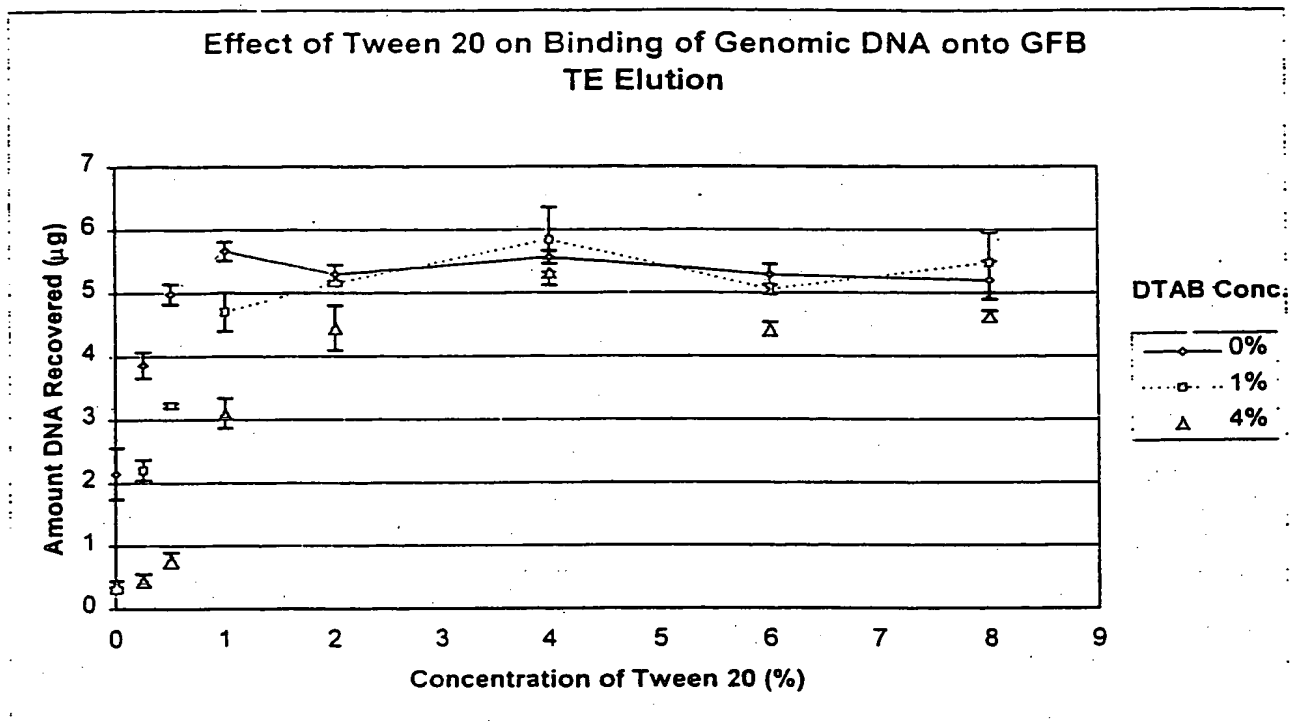


Figure 25

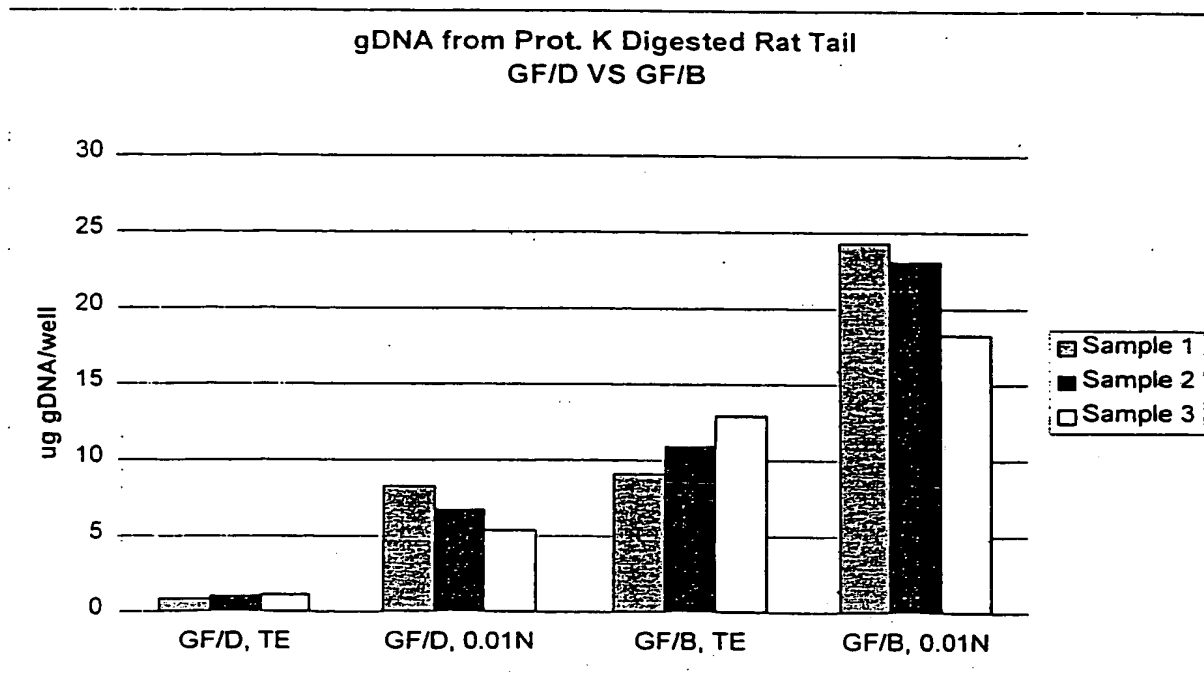


Figure 26

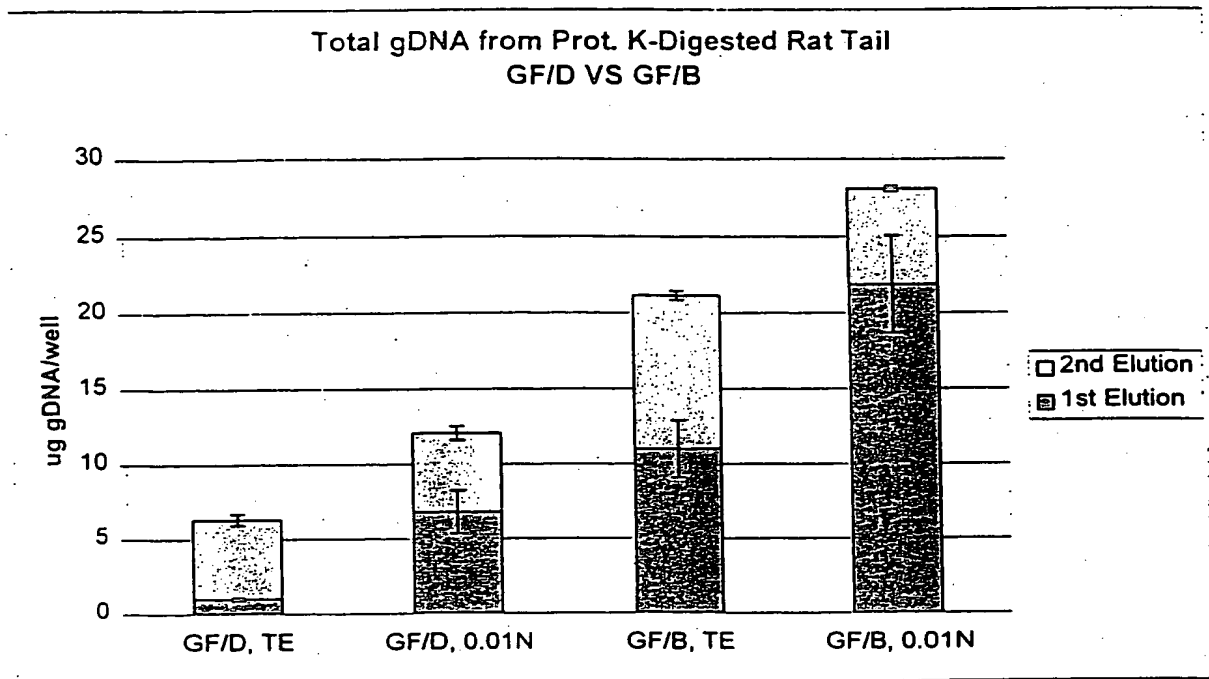
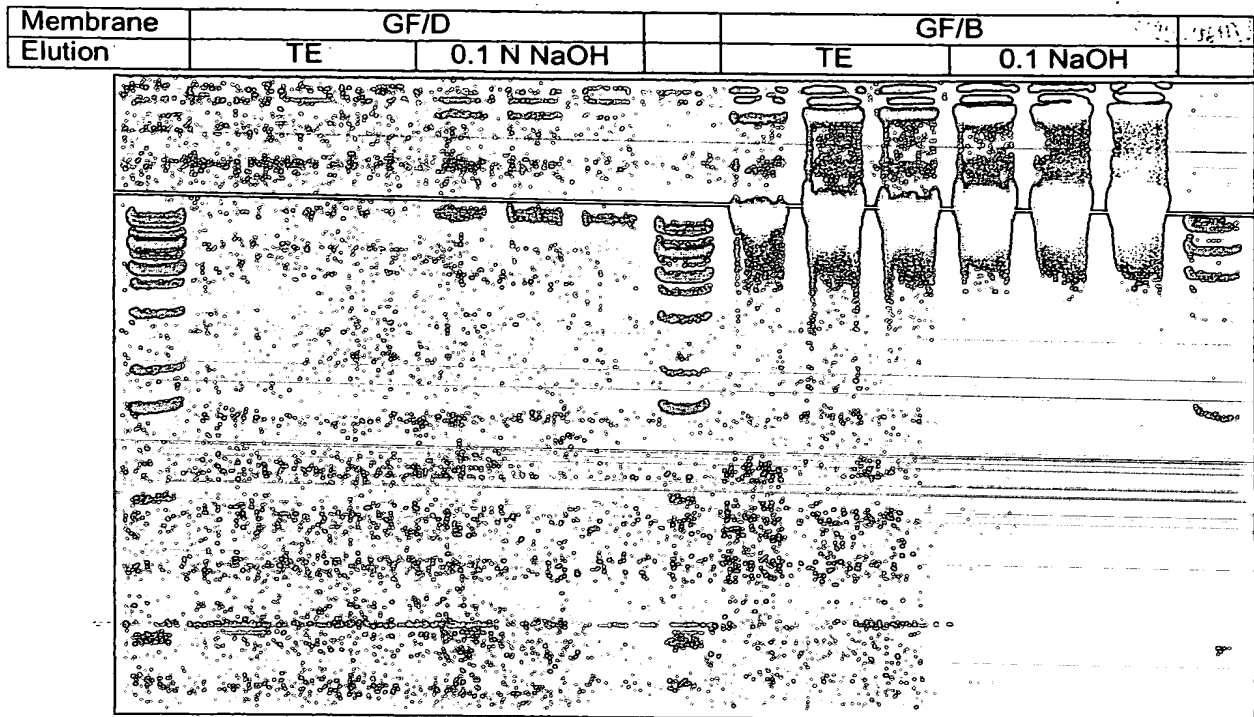


Figure 27



Genomic DNA from 50 mg rat tail sections digested with 1 mg of Prot. K & 1% DTAB and bound onto GF/B and GF/D membranes under 3.75 M GuSCN and 4.5 % Tween 20. The gDNA was finally eluted with of 150 mL of 1X TE and 0.01 N NaOH solutions and 20 mL was used for gel electrophoresis (1 % agarose).

Figure 28

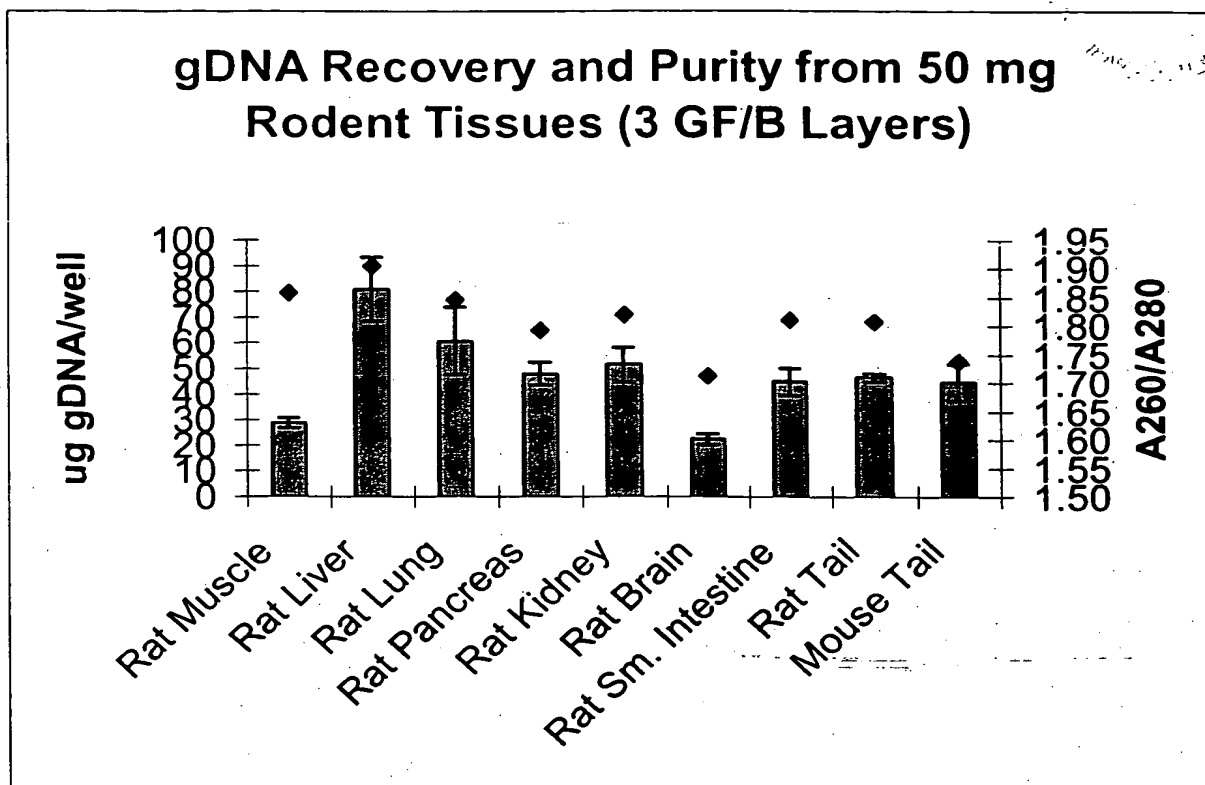
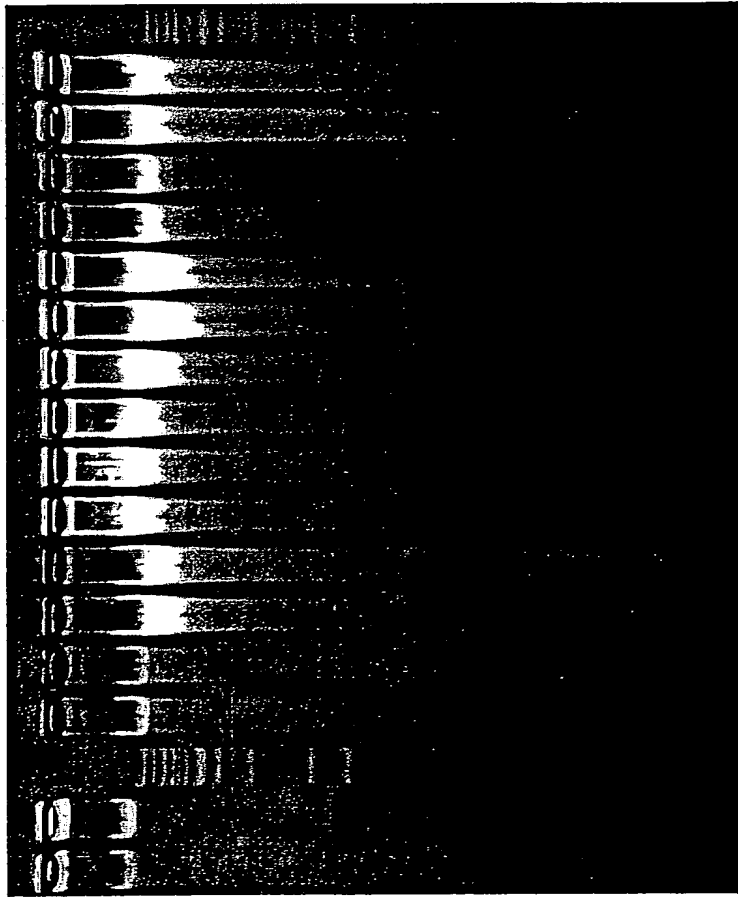


Figure 29

gDNA from 50 mg Rat Tissues

Clontech
gDNA
1 ug 2 ug

Muscle Liver Lung Pancreas Kidney Brain Sm. Intest



Loaded 10 uL per well out of 200 uL Eluate

gDNA fr. 50 mg Rodent Tails

Clontech
gDNA
1 ug 2 ug

Rat Mouse

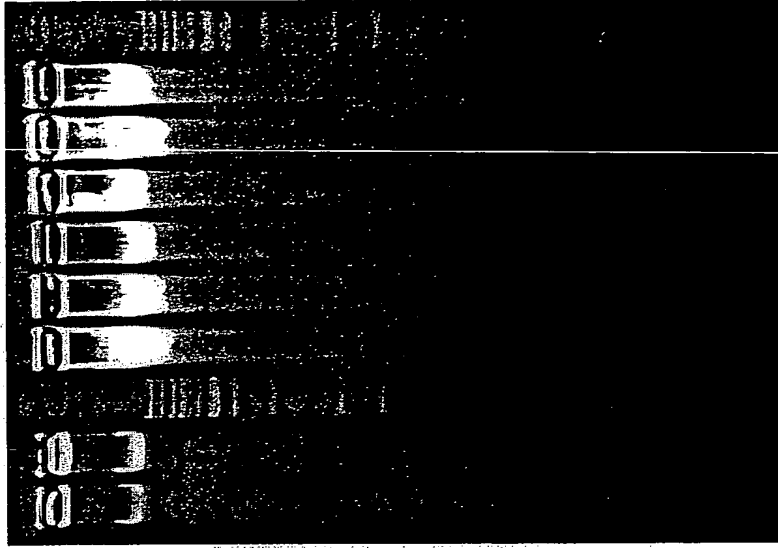


Figure 30